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Attorney Docket No.: 5308-291

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re: Sheppard et al.

Confirmation No.: 6572

Application No.: 10/758,871

Group Art Unit: 2811

Filed: January 16, 2004

Examiner: Tom Thomas

For: NITRIDE-BASED TRANSISTORS WITH A PROTECTIVE LAYER AND A LOW-DAMAGE RECESS AND METHODS OF FABRICATION THEREOF

Date: August 24, 2004

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Sir:

Attached is a list of documents on Form PTO-1449, together with a copy of any listed foreign patent document and/or non-patent literature. It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. § 1.56 and Section 609 of the MPEP.

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. § 1.97(b), within three months of the filing date of the above-referenced application or before the mailing of a first Office Action on the merits, whichever event occurs last. Therefore, no fee is believed due. However, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,

Elizabeth A. Stanek  
Registration No. 48,568

Myers Bigel Sibley & Sajovec, P.A.  
P. O. Box 37428  
Raleigh, North Carolina 27627  
Telephone: (919) 854-1400  
Facsimile: (919) 854-1401  
Customer No. 20792

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Erin A. Campion

Substitute form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **A1** of **A1***Complete if Known*

Application Number	10/758.871
Filing Date	January 16, 2004
First Named Inventor	Sheppard
Group Art Unit	2811
Examiner Name	Tom Thomas
Attorney Docket Number	5308-291

**U.S. PATENTS AND PATENT PUBLICATIONS**

Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T
		Office	Number	Kind Code (if known)			

**OTHER NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
	1.	Ben-Yaacov et al., "AlGaIn/GaN Current Aperture Vertical Electron Transistors with Regrown Channels," <i>Journal of Applied Physics</i> . Vol. 95, No. 4, pp. 2073-2078 (2004).	
	2.	Burm et al. "Ultra-Low Resistive Ohmic Contacts on n-GaN Using Si Implantation," <i>Applied Physics Letters</i> . Vol. 70, No. 4, 464-66 (1997).	
	3.	Heikman, et al., "Mass Transport Regrowth of GaN for Ohmic Contacts to AlGaIn/GaN," <i>Applied Physics Letters</i> . Vol. 78, No. 19, pp. 2876	
	4.	Shen et al., "High-Power Polarization-Engineered GaN/AlGaIn/GaN HEMTs Without Surface Passivation," <i>IEEE Electronics Device Letters</i> . Vol. 25, No. 1, pp. 7-9 (2004).	
	5.	United States Patent Application entitled "Semiconductor Devices Having a Hybrid Channel Layer, Current Aperture Transistors and Methods of Fabricating the Same," Serial No. 10/849,589, filed May 20, 2004 (Attorney Docket No. 5308-412).	
	6.	United States Patent Application entitled "Methods of Fabricating Nitride-Based Transistors Having Regrown Ohmic Contact Regions and Nitride-Based Transistors Having Regrown Ohmic Contact Regions," Serial No. 10/849,617, filed May 20, 2004 (Attorney Docket No. 5308-413).	
	7.	United States Patent Application entitled "Methods of Fabricating Nitride-Based Transistors with a Cap Layer and a Recessed Gate," filed July 23, 2004 (Attorney Docket No. 5308-392).	
	8.	United States Patent Application entitled "Methods of Having Laterally Grown Active Region and Methods of Fabricating Same," filed July 26, 2004 (Attorney Docket No. 5308-374).	
	9.	United States Patent Application entitled "Nitride-Based Transistors and Methods of Fabrication Thereof Using Non-Etched Contact Recesses," Serial No. 10/617,843, filed July 11, 2003 (Attorney Docket No. 5308-248).	
	10.	United States Patent Application entitled, "Silicon Carbide on Diamond Substrates and Related Devices and Methods," (Cree Docket No. P0387).	

Examiner Signature

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.